



DESCRIPTION

The DB201S~DB207S are available in DBS package.

FEATURES

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0
- Available in DBS package

ORDERING INFORMATION

Package Type	Part Number
DBS	DB201S
	DB202S
	DB203S
	DB204S
	DB205S
	DB206S
	DB207S
Note	SPQ: 1,500pcs/Reel
AiT provides all RoHS Compliant Products	

MECHANICAL DATA

Case: DBS, molded plastic

Terminals: plated leads solderable per MIL-STD-202, Method 208

Polarity: as marked on case

Mounting position: Any

Marking: type number



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbol	DB201S	DB202S	DB203S	DB204S	DB205S	DB206S	DB207S	Unit	
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
Working Peak Reverse Voltage	V_{RWM}									
DC Blocking Voltage	V_{DC}									
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V	
Average Rectified Output Current ^{NOTE1} @ $T_A=40^\circ\text{C}$	I_o	2.0							A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	60							A	
Forward Voltage per element @ $I_F=2.0\text{A}$	V_{FM}	1.1							V	
Peak Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	I_R	5.0							μA
	$T_A=125^\circ\text{C}$		500							
Typical Junction Capacitance per leg ^{NOTE2}	C_J	25							pF	
Typical Thermal Resistance per leg	$R_{\theta JA}$	40							$^\circ\text{C/W}$	
	$R_{\theta JL}$	15							$^\circ\text{C/W}$	
Operating and Storage Temperature Range	T_J, T_{STG}	-55~150							$^\circ\text{C}$	

NOTE1: Mounted on glass epoxy PC board with 1.3mm² solder pad.

NOTE2: Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



TYPICAL PERFORMANCE CHARACTERISTICS

Figure 1. Output Current Derating Curve

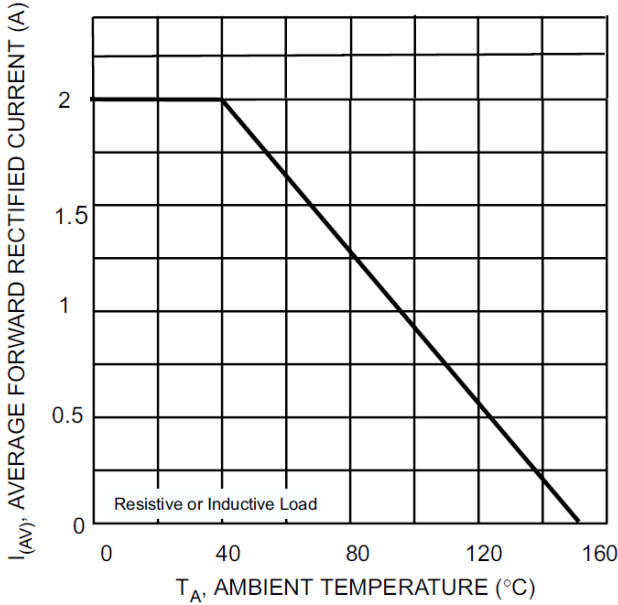


Figure 2. Typical Forward Characteristics (per leg)

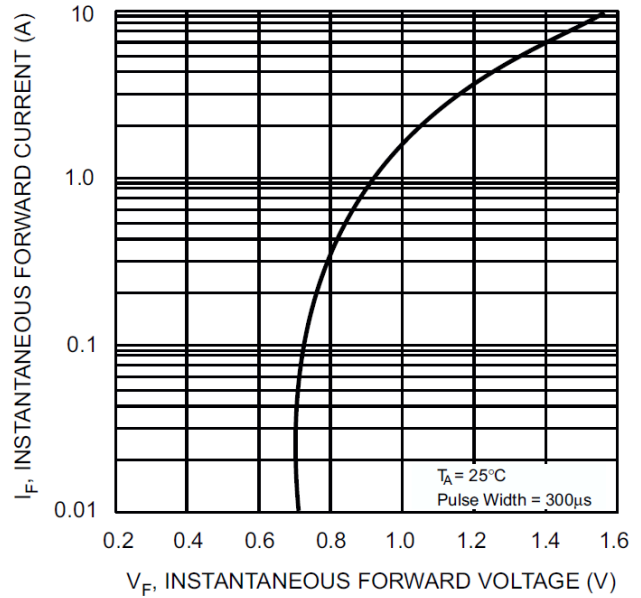


Figure 3. Maximum Peak Forward Surge Current (per leg)

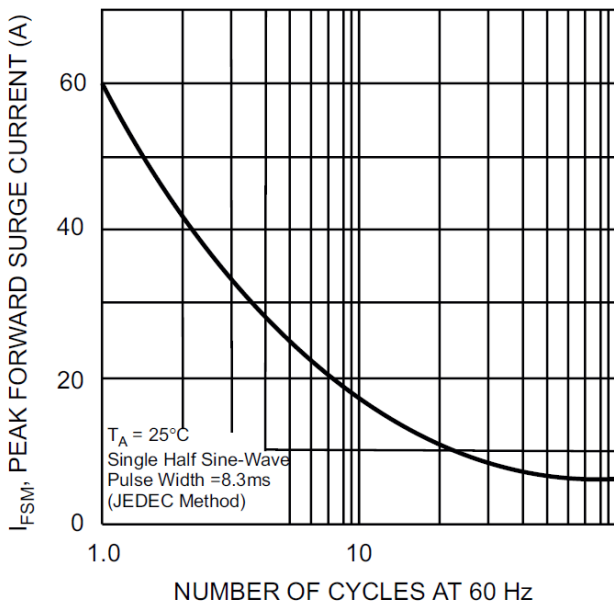
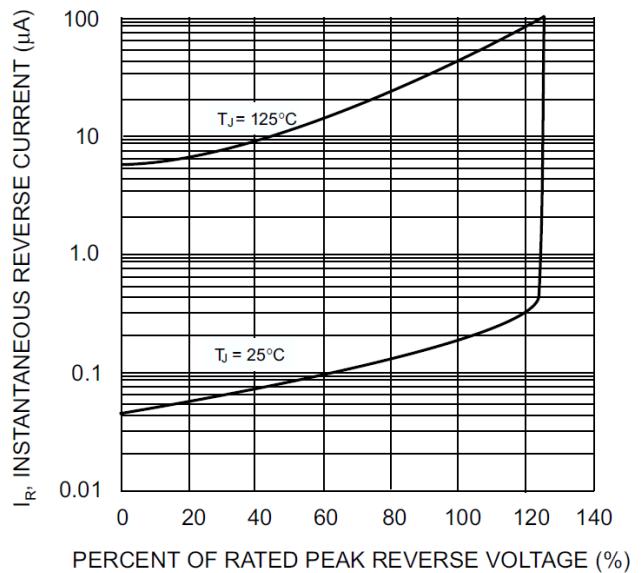


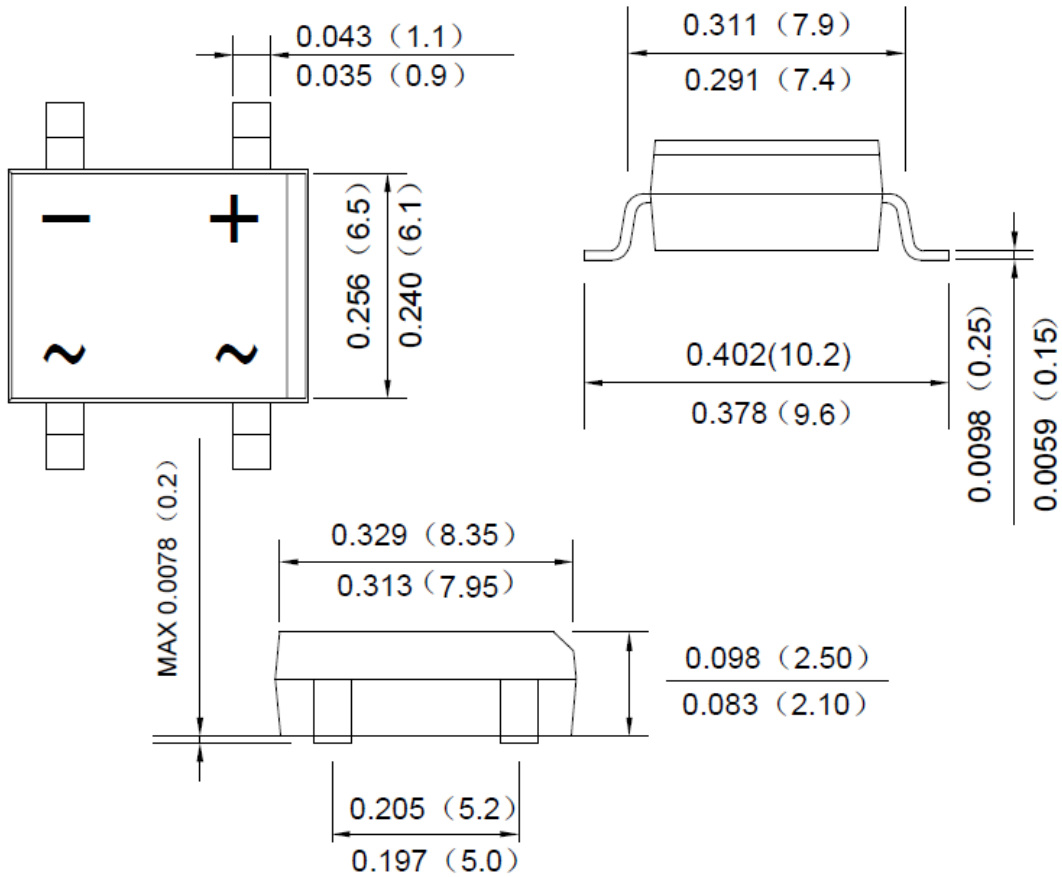
Figure 4. Typical Reverse Characteristics (per element)





PACKAGE INFORMATION

Dimension in DBS Package (Unit: inches (mm))





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